

We claim:

1. An actuating member for a railway vehicle brake assembly, such railway vehicle brake assembly having an air bag actuator incorporated therein, said actuating member comprising:

5 (a) a first substantially vertically disposed plate like member, said first substantially vertically disposed plate like member having a first substantially planer surface engageable with a first surface of a second substantially vertically disposed plate like member attached to such air bag actuator;

10 (b) a substantially horizontally disposed plate like member connected to said first substantially vertically disposed plate like member adjacent a bottom edge thereof and extending substantially perpendicular to said first substantially planer surface of said first substantially vertically disposed plate  
15 like member for shielding at least a first portion of such air bag actuator from detrimental extraneous foreign material; and

(c) a means connected to a radially opposed second surface of said first substantially vertically disposed plate like member for securing said actuating member to a control linkage  
20 of such railway vehicle brake assembly.

2. An actuating member, according to claim 1, wherein said actuating member further includes a first plate like member connected to an upper surface of said substantially horizontally

disposed member and to said first planer surface of said first substantially vertically disposed plate like member adjacent a first side edge thereof and extending substantially perpendicular thereto for shielding at least a second portion of such air bag actuator from detrimental extraneous foreign material and for providing added strength between said first substantially vertically disposed member and said substantially horizontally disposed member.

10           3.    An actuating member, according to claim 2, wherein said actuating member further includes a second plate like member connected to said upper surface of said substantially horizontally disposed member and to said first planer surface of said first substantially vertically disposed plate like member adjacent a second side edge thereof and extending substantially perpendicular thereto for shielding at least a third portion of such air bag actuator from detrimental extraneous foreign material and for providing added strength between said first substantially vertically disposed member and said substantially horizontally disposed member.

4.    An actuating member, according to claim 1, wherein said first substantially vertically disposed plate like member includes at least one mounting aperture formed therethrough for

enabling securing of such air bag actuator to said first substantially vertically disposed member.

6. An actuating member, according to claim 1, wherein  
5 said means connected to said radially opposed second surface of said substantially first vertically disposed plate like member for securing said actuating member to such control linkage of such railway vehicle brake assembly includes at least one plate member having an aperture formed therethrough and a pin member  
10 disposed in said aperture for securing said at least one plate member to such control linkage.

7. An apparatus for mounting an air bag actuator to at least one brake beam, said apparatus comprising:

15 (a) a first substantially vertically disposed plate like member having a planar surface portion for engagement with a substantially planar surface portion of a second substantially vertically disposed plate like member connected to such air bag actuator;

20 (b) a guide means connected to and disposed closely adjacent a first outer edge of and substantially perpendicular to said planar surface portion of said first substantially vertically disposed plate like member for guiding and alignment during reciprocal motion of such air bag actuator; and

(c) a securing means connected to said first substantially vertically disposed plate like member for enabling attachment of said apparatus to a rigid structure.

5           8. An apparatus, according to claim 7, wherein said apparatus includes a pair of guide means, a second one of said pair of guide means disposed closely adjacent a second outer edge of and substantially perpendicular to said planer surface portion of said first substantially vertically disposed plate  
10 like member for guiding and alignment during reciprocal motion of such air bag actuator

          9. An apparatus, according to claim 7, wherein said planar surface portion of said first substantially vertically disposed  
15 plate like member includes at least one aperture formed therethrough for enabling attachment to such air bag actuator.

          10. An air spring actuator assembly, said air spring actuator assembly comprising:

20           (a) at least one air bag spring;

          (b) a first substantially vertically disposed plate like member, said first substantially vertically disposed plate like member having a first substantially planer surface engageable with a first surface of a second substantially vertically

disposed plate like member attached to said at least one air bag spring;

(c) a substantially horizontally disposed plate like member connected to said first substantially vertically disposed plate like member adjacent a bottom edge thereof and extending substantially perpendicular to said first substantially planer surface of said first substantially vertically disposed plate like member for shielding at least a first portion of said at least one air bag spring from detrimental extraneous foreign material;

(d) a means connected to a radially opposed second surface of said first substantially vertically disposed plate like member for securing said actuating member to a control linkage of a railway vehicle brake assembly;

(e) a second substantially vertically disposed plate like member having a second planar surface portion for engagement with a substantially planar surface portion of a second substantially vertically disposed plate like member connected to such air bag spring;

(f) a guide means connected to and disposed closely adjacent a first outer edge of and substantially perpendicular to at least one of said first and said second planer surface portion of a respective one of said first and said second substantially vertically disposed plate like member for guiding

and alignment during reciprocal motion of such air bag actuator;  
and

(g) a securing means connected to said second substantially  
vertically disposed plate like member for enabling attachment of  
5 said apparatus to a rigid structure.

11. An air spring actuator assembly, according to claim 10,  
wherein said means connected to a radially opposed second  
surface of said first substantially vertically disposed plate  
10 like member for securing said actuating member to a control  
linkage of a railway vehicle brake assembly includes a push rod  
and a shield member for substantially protecting said air spring  
actuator from foreign matter damage.

15 12. An air spring actuator, according to claim 10, wherein  
said air spring actuator further includes a means for limiting  
reciprocal motion of the said air spring actuator during  
evacuation of air pressure from said at least one air bag  
spring.

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13. An air spring actuator, according to claim 12, wherein  
said means for limiting reciprocal motion of said brake actuator  
is a rigid member disposed internally within said air spring  
actuator.

14. An air spring actuator, according to claim 10, wherein said air spring actuator further includes an air inlet in communication with said at least one air bag spring.

5        15. An air spring actuator, according to claim 10, wherein said air spring actuator further includes a means for visual determination of a travel height of said air spring actuator.

16.        An air spring actuator, according to claim 11,  
10 wherein said air spring actuator further includes a means for guiding longitudinal motion of said push rod and shield for substantially minimizing force loads on said air spring actuator during reciprocal motion of said air spring actuator due to linkage bail and/or misalignment.

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17. An air spring actuator, according to claim 10, wherein said air spring actuator further includes a visual travel indicator.

20        18. An air spring actuator, according to claim 17, wherein said visual travel indicator is a linear measuring device.

19. An air spring actuator, according to claim 10, wherein said air spring actuator further includes a means for controlling volume of said air spring actuator.